

# GRANGER RANCHES WETLAND CONSERVATION EASEMENT

## Montana Board of Land Commissioners

May 2008

<b>Acquiring Agency:</b>	<b>Montana Fish, Wildlife &amp; Parks</b>
<b>Land Interest:</b>	<b>Conservation Easement</b>
<b>Cost:</b>	<b>Donation by private landowner</b>
<b>Property Specifics:</b>	<b>Approximately 225 acres in Madison County</b> , located six miles south of Ennis
<b>Resource Values:</b>	The proposed conservation easement will allow Montana Fish, Wildlife and Parks to apply wetland mitigation funds to continue an <b>exceptional wetland habitat restoration project</b> on Granger Ranches property along <b>O'dell Creek, a spring-fed tributary of the Madison River</b> . To date, this project has restored several miles of stream channel and dozens of acres of associated wetlands, as a cooperative venture among the landowners, Farm Services Administration, NRCS, PPL Montana, US Fish & Wildlife Service, Montana Land Reliance, and FWP. This new phase of the project will restore the natural configuration of an additional 2 miles of historically channelized stream and more than 16 acres of wetland habitat. The <b>landowners (Laszlo family) received the Montana Wetland Stewardship Award</b> in 2005 for their efforts in pursuing the initial phases of this riparian/wetland restoration project.
<b>Land Board Role:</b>	Approval of the project by the Land Board is required because FWP proposes to acquire a conservation easement interest in these 225 acres. <b>Use of the in-lieu-fee mitigation funding requires this permanent land interest to ensure protection of the restored wetlands.</b>
<b>Process:</b>	<b>FWP Draft Environmental Analysis</b> , released April 7, with comments accepted through April 30, 2008 <b>Decision Notice</b> , issued by FWP on May 5, 2008, recommends approval of the project. Thirteen public comments were received, with 12 in support and one expressing concern about the lack of open public access. <b>FWP Commission Approval</b> , anticipated May 15, 2008



# **Montana Fish, Wildlife & Parks**

1400 South 19<sup>th</sup> Avenue  
Bozeman, MT 59718

May 5, 2008

To: Governor's Office, Mike Volesky, State Capitol, Room 204, P.O. Box 200801, Helena, MT 59620-0801  
Environmental Quality Council, State Capitol, Room 106, P.O. Box 201704, Helena, MT 59620-1704  
Dept. of Environmental Quality, Metcalf Building, P.O. Box 200901, Helena, MT 59620-0901  
Dept. of Natural Resources & Conservation, P.O. Box 201601, Helena, MT 59620-1601  
Montana Fish, Wildlife & Parks:

Director's Office	Parks Division	Lands Section	FWP Commissioners
Fisheries Division	Legal Unit	Wildlife Division	Design & Construction

MT Historical Society, State Historic Preservation Office, P.O. Box 201202, Helena, MT 59620  
MT State Parks Association, P.O. Box 699, Billings, MT 59103  
MT State Library, 1515 E. Sixth Ave., P.O. Box 201800, Helena, MT 59620  
Madison County Commissioners, P.O. Box 278, Virginia City, MT 59755-0278  
James Jensen, Montana Environmental Information Center, P.O. Box 1184, Helena, MT 59624  
Jeff Laszlo, P.O. Box 691; Ennis, MT 59729  
James F. Wellington, 18 Wellington Road. Locust Valley, NY 11560  
Charles H. Wellington, 140 Linden Farms Road, Locust Valley, NY 11560  
Janet Ellis, Montana Audubon Council, P.O. Box 595, Helena, MT 59624  
George Ochenski, P.O. Box 689, Helena, MT 59624  
Jerry DiMarco, P.O. Box 1571, Bozeman, MT 59771  
Bob Raney, 212 South 6<sup>th</sup>, Livingston, MT 59047  
Montana Wildlife Federation, P.O. Box 1175, Helena, MT 59624  
Wayne Hurst, P.O. Box 728, Libby, MT 59923  
Glenn Hockett, Gallatin Wildlife Association, 745 Doane Road, Bozeman, MT 59715  
Tom Sather, Headwaters Fish & Game Association, P.O. Box 1941, Bozeman, MT 59771-1941  
John Gatchell, Montana Wilderness Association, P.O. Box 635, Helena, MT 59624  
William Fairhurst, Public Lands Access Association, P.O. Box 247, Three Forks, MT 59752  
Skyline Sportsman Association, P.O. Box 173, Butte, MT 59701  
Prickly Pear Sportsman Association, 21 S Hills Road, Clancy, MT 59634-9807  
Anaconda Sportsman Club, #2 Cherry, Anaconda, MT 59711  
Jefferson Valley Sportsman Association, Don Drake, PO Box 255, Whitehall, MT 59759  
Spence Hegstad, FWP Foundation, Steamboat Block 616, Helena Ave, Helena, MT 59601  
Madison-Gallatin Chapter of Trout Unlimited, Rick Arnold, President; 1735 W. Main; Bozeman, MT 59715  
State Land Coalition, Jack Atcheson President, 3210 Ottawa Street, Butte, MT 59701  
Jack Jones, 3014 Irene Street, Butte, MT 59701  
Bill Tash, 1200 Hwy 178, Dillon, MT 59725  
Jeff Laszlo, Granger Ranches, PO Box 691, Ennis MT 59279  
Jon Jourdonnais, Director Hydro Licensing and Compliance, PPL Montana, [jhjourdonnais@pplweb.com](mailto:jhjourdonnais@pplweb.com)  
Ray and Juni Clark, PO Box 1450, Ennis MT 59729  
Richard Lessner, Executive Director, Madison River Foundation, PO Box 1527, Ennis MT 59729  
Jeffrey Everett, Wildlife Biologist, USDI Fish and Wildlife Service, Dillon Ranger District, 420 Barrett Street, Dillon MT 59725  
Margaret Kent Newton, William J. Slaton, Cameron MT  
Middleton (Sandy) Martin, PO Box 1568, Ennis MT 59729

James F. Wellington, Longhorn Ranch, [jwellington@innocenti-webel.com](mailto:jwellington@innocenti-webel.com)  
Montana Land Reliance, PO Box 355, Helena MT 59624-0355  
Amy Cilimburg, Avian Science Center, Division of Biological Sciences, The University of Montana,  
Missoula MT 59812  
Sunni Heikes-Knapton, PO Box 1178, Ennis MT 59729  
Carrie Mosley, Assistant State Conservationist-Programs, NRCAS – State Office, 10 East Babcock  
Street, Room 439, Bozeman MT 59715

Ladies and Gentlemen:

The enclosed Decision Notice has been prepared for the acquisition by Montana Fish, Wildlife & Parks (FWP) of a donated Conservation Easement on a 225-acre tract of the Granger Ranches in Madison County, Montana. The easement area is an important spawning area for brown and rainbow trout as well as important habitat for resident and migratory birds and other wildlife. FWP proposes to acquire this easement and to restore, enhance, and create within it, a 16.64 wetland. FWP will begin restoration of the wetlands pending final approval of the Conservation Easement and will complete construction on-site no later than June 30, 2008. The Conservation Easement area and restoration site are part of the O'Dell Creek Headwaters that was drained by ditches in 1955.

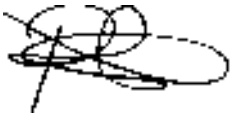
This Decision Notice and EA is available for review in Helena at FWP's Headquarters, the State Library, and the Environmental Quality Council. It also may be obtained from FWP at the address provided below, or viewed on FWP's Internet website: <http://www.fwp.mt.gov>.

Questions regarding this Decision Notice should be mailed to:

Montana Fish, Wildlife & Parks  
C/O O'Dell Creek Headwaters EA  
1400 South Nineteenth Avenue  
Bozeman, MT 59715

Or e-mailed to: [thinz@mt.gov](mailto:thinz@mt.gov)

Sincerely,

A handwritten signature in black ink, appearing to be "PJF", written over a horizontal line.

Patrick J. Flowers  
Region Three Supervisor

Attachment

## **O'DELL CREEK HEADWATERS EA DECISION NOTICE**

### **Proposal**

An Environmental Assessment has been prepared and disseminated for the acquisition of a Conservation Easement on a 225-acre parcel of the Granger Ranch, Madison County, Montana. Montana Department of Fish, Wildlife and Parks (FWP) proposes to acquire by donation this 225-acre Conservation Easement within the O'Dell Creek Headwaters wetlands.

The Granger Ranch Conservation Easement lies within Madison County, approximately 6 miles south of Ennis. It contains a portion of an estimated 1,000-acre historic wetland, much of which was drained by ditching in 1955. FWP further proposes to restore, enhance, and create approximately 12,355 feet of O'Dell Creek tributary streambed within the Conservation Easement area that is currently made up of drainage ditches and channelized stream course which will also result in restoring at least 16.64 acres of surrounding wetlands. Montana Fish, Wildlife and Parks' expenditures toward the wetland restoration would be paid for using wetland mitigation funds.

### **Environmental Policy Act Process**

In compliance with requirements of the Montana Environmental Policy Act (MEPA), an environmental assessment was completed by Fish, Wildlife & Parks (FWP) for the proposed project and was released for public comment on April 9, 2008.

Public comment for the project was taken through April 30, 2008. The Environmental Assessment was mailed to 52 individuals and groups on the FWP MEPA mailing list. A legal notice announcing the availability of the EA was published in *The Madisonian* and *Bozeman Daily Chronicle* on April 13, 2008. This document was also available on the FWP's Internet web site ([www.fwp.mt.gov](http://www.fwp.mt.gov)).

There are no modifications to the Draft Environmental Assessment based on internal comment, and no modifications based on public comment. The draft version of the EA and this Decision Notice together serve as the final document for this proposal.

### **Summary of Public Comment**

Thirteen written public comments were received, all expressing support for the fish and wildlife benefits of the project. One written comment with recommendations was received from Tony Schoonen of the Skyline Sportsman Association who expressed concerns about public access to the property for public enjoyment.

Said Mr. Schoonen: "...we have considerable reservation about this project specifically and other similar projects elsewhere in the state in which significant sums of public money are expended to improve conditions for fish and wildlife on private properties where no prospect exists for meaningful public enjoyment of the fruits of those projects." His letter went on to state, "It is particularly difficult for us to accept when the projects are located on lands owned by wealthy individuals who are perfectly capable of paying for the projects from their own pocket. We find it difficult to believe that suitable wetland rehabilitation projects do not exist on public lands where the obligation to Corps of Engineers financial contributions could be met and public use ensured." He later added, "In the present instance, we do not wish to file a specific objection."

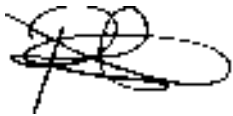
A written comment from Jeff Laszlo of the Granger Ranches pointed out the following regarding public hunting on the ranch: "Granger Ranches has a long history of quietly working with the public to allow for safe and ethical hunting on our lands. In 2007 over one hundred FWP hunting permissions were given out by Granger Ranches on a first-come first-served basis. The only consideration for hunting on our ranch has been for the safety of livestock, the outdoorsmen themselves and those residing on the ranch. Last year public hunting on our property included both bow and rifle. Antelope, deer and elk were all harvested."

It is also our understanding that the Granger Ranch has allocated substantial public hunting. Although the public would not have access to the specific easement area, we would expect public access to continue on the ranch.

## **Decision**

The express purpose of this project is wetland mitigation, specifically to restore 16.64 acres of wetlands in an area that must be protected in perpetuity by a Conservation Easement. These requirements were previously agreed to by FWP and the Army Corps of Engineers that has regulatory authority over the project. Further, FWP and the Corps have previously agreed that this wetland mitigation project would be completed by FWP no later than June 30, 2008. FWP considers this Granger Ranch/O'Dell Creek Headwaters wetland site to be an excellent mitigation site given the success of restoration efforts there since 2005. The Granger Ranch Conservation Easement area, more specifically the O'Dell Creek Headwaters wetlands, is an excellent area for wetland restoration given its drained condition that once fully restored, will offer significant benefits to fish and wildlife populations. Public enjoyment of the wildlife resource on the property as well as on surrounding public and private lands represents an additional benefit from this wetland mitigation project. I did not identify any significant impacts on the human environment associated with the proposal. Therefore, I conclude that the Environmental Assessment is the appropriate level of analysis, and that an Environmental Impact Statement is not required. It is my decision to proceed with the O'Dell Creek Headwaters Conservation Easement and restoration project as has been proposed. The draft version of the EA and this Decision Notice together serve as the final document for this proposal.

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Patrick J. Flowers  
Regional Supervisor  
Bozeman, MT

May 5, 2008

## ***FWP COMMISSION AGENDA ITEM COVER SHEET***

**Meeting Date:** May 15, 2008

**Agenda Item:** Granger Ranch Wetland Easement

**Division:** Wildlife

**Action Needed:** Approval of Final Rule/Action

**Time Needed on Agenda for this Presentation:** \_\_\_\_\_

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### **Background**

FWP administered an "In Lieu Fee" wetland mitigation program from March 2004-December 2006. Over that period of time, FWP collected fees from 12 Section 404 permit applications. FWP is obligated to the U.S. Army Corps of Engineers to use those funds for mitigating wetland impacts and for follow-up protection and monitoring. FWP is specifically responsible for establishing 16.6 acres of new wetland habitat and overlaying a protective easement on the wetland and adjacent upland acres. FWP has been working with a number of partners to restore ditched wetland habitat in the upper reaches of the O'Dell Creek drainage south of Ennis in Madison County. A mitigation project has been negotiated with the Granger Ranch for completion this spring. A protective easement held by FWP is required for completely fulfilling FWP's obligations. The perpetual conservation easement encompasses 225 acres and would be donated by the Granger Ranch.

### **Public Involvement Process & Results**

A three-week public comment period on the project environmental assessment ends April 30, 2008. As of April 29, 2008, twelve written public comments were received, all expressing support for the fish and wildlife benefits of the project. One written comment with recommendations expressed concerns about public access to the property for public enjoyment.

### **Alternatives and Analysis**

None

### **Agency Recommendation & Rationale**

FWP recommends that the Commission approve the acceptance of the donated conservation easement. This project represents the third phase of a multi-phased restoration project. Earlier restored habitats have become very productive for breeding and migrating waterfowl as well as many other resident and migratory wildlife species. The wetland values associated with this project are worthy of a perpetual conservation easement and FWP is obligated to have the easement in place, and all mitigation work completed, by the end of June 2008.

### **Proposed Motion**

I move that the Commission approve FWP acceptance of the donated 225-acre conservation easement.



# **Montana Fish, Wildlife & Parks**

1400 South 19<sup>th</sup> Ave  
Bozeman, MT 59718

April 9, 2008

To: Governor's Office, Mike Volesky, State Capitol, Room 204, P.O. Box 200801, Helena, MT 59620-0801  
Environmental Quality Council, State Capitol, Room 106, P.O. Box 201704, Helena, MT 59620-1704  
Dept. of Environmental Quality, Metcalf Building, P.O. Box 200901, Helena, MT 59620-0901  
Dept. of Natural Resources & Conservation, P.O. Box 201601, Helena, MT 59620-1601  
Montana Fish, Wildlife & Parks:  
    Director's Office      Parks Division      Lands Section      FWP Commissioners  
    Fisheries Division      Legal Unit      Wildlife Division      Design & Construction  
MT Historical Society, State Historic Preservation Office, P.O. Box 201202, Helena, MT 59620  
MT State Parks Association, P.O. Box 699, Billings, MT 59103  
MT State Library, 1515 E. Sixth Ave., P.O. Box 201800, Helena, MT 59620  
Madison County Commissioners, P.O. Box 278, Virginia City, MT 59755-0278  
James Jensen, Montana Environmental Information Center, P.O. Box 1184, Helena, MT 59624  
Jeff Laszlo, P.O. Box 691; Ennis, MT 59729  
James F. Wellington, 18 Wellington Road. Locust Valley, NY 11560  
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George Ochenski, P.O. Box 689, Helena, MT 59624  
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John Gatchell, Montana Wilderness Association, P.O. Box 635, Helena, MT 59624  
William Fairhurst, Public Lands Access Association, P.O. Box 247, Three Forks, MT 59752  
Skyline Sportsman Association, P.O. Box 173, Butte, MT 59701  
Prickly Pear Sportsman Association, 21 S Hills Road, Clancy, MT 59634-9807  
Anaconda Sportsman Club, #2 Cherry, Anaconda, MT 59711  
Jefferson Valley Sportsman Association, Don Drake, PO Box 255, Whitehall, MT 59759  
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State Land Coalition, Jack Atcheson President, 3210 Ottawa Street, Butte, MT 59701  
Jack Jones, 3014 Irene Street, Butte, MT 59701  
Bill Tash, 1200 Hwy 178, Dillon, MT 59725

Ladies and Gentlemen:

Montana Fish, Wildlife & Parks (FWP) proposes to: 1) acquire a donated conservation easement on approximately 225 acres of Madison River floodplain land from the Granger Ranch 6 miles south of Ennis, Montana; and, 2) restore, enhance, and create approximately 12,355 feet of O'Dell Creek tributary streambed in an area that is currently made up of drainage ditches and channelized stream course. This restoration will result in restoring at least 16.64 acres of surrounding historic wetland habitat. Although the proposed project does not include public access provisions, it will result in the recruitment of wild trout and other wildlife to the Madison River and surrounding riparian habitat.

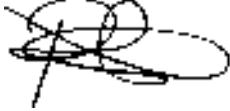
The draft EA is available for review from FWP at the address provided above or viewed on FWP's Internet website: <http://www.fwp.mt.gov/publicnotices>.

Montana Fish, Wildlife & Parks invites you to comment on the attached proposal. Public comment will be accepted until 5:00 p.m. on April 30, 2008. Comments should be sent to the following:

Montana Fish, Wildlife & Parks  
C/O O'Dell Creek Headwaters EA  
1400 South 19<sup>th</sup> Avenue  
Bozeman, MT 59718-5496

Or emailed to: [thinz@mt.gov](mailto:thinz@mt.gov).

Sincerely,

A handwritten signature in black ink, appearing to be "Patrick Flowers", written over a horizontal line.

Patrick Flowers  
Region Three Supervisor  
Attachment



# **O'Dell Creek Headwaters (OCH) Restoration and Conservation Easement Project**

## **Environmental Assessment**

### **Background**

Wetland and riparian habitats comprise an extremely small physical area (<1%) of the western United States. Although these habitats are restricted in area, they harbor a wide diversity of birds and other wildlife. Restoration and conservation of these habitats is occurring in Montana and throughout the west. A cooperative restoration effort was initiated in 2005 by private landowners, state and federal agencies, and local non-profit organization at the headwaters of O'Dell Creek in southwest Montana (Fletcher et al. 2006). This wetland complex area was partially drained by constructing ditches and by channelizing upper O'Dell Creek in 1955. This Environmental Assessment analyzes a wetland restoration project occurring in the area.

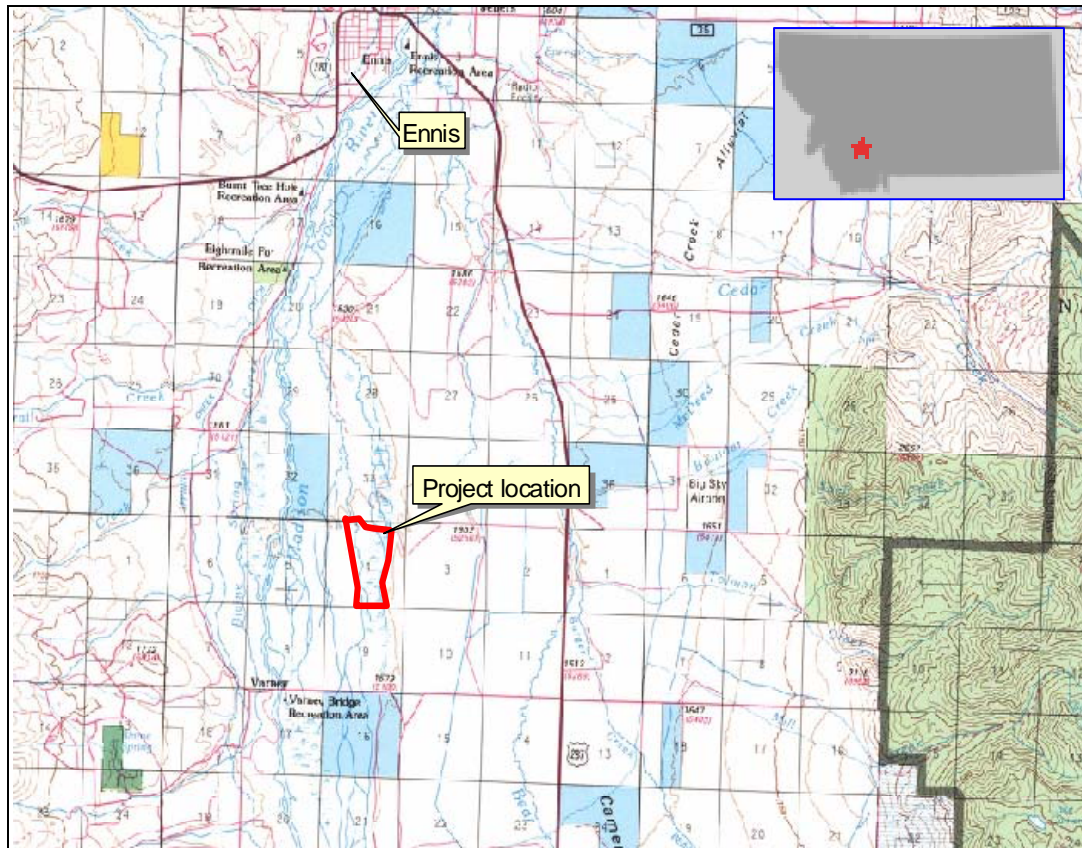
The Granger Ranch encompasses much of the headwaters area for O'Dell Creek including the proposed project site. A Montana Land Reliance conservation easement currently protects the overall conservation values of the Granger Ranch.

### **Chapter 1.0: Purpose of and Need for Action**

#### **1.1 Proposed Action**

Montana Fish, Wildlife & Parks (FWP) proposes to 1) acquire a donated conservation easement on approximately 225 acres from the Granger Ranch 6 miles south of Ennis, Montana and 2) restore, enhance, and create approximately 12,355 feet of O'Dell Creek tributary streambed in an area that is currently made up of drainage ditches and channelized stream course, which will also result in restoring at least 16.64 acres of surrounding historic wetland habitat.

Location of the proposed conservation easement: Madison County, Montana T7S, R1W Section 4



**Figure 1. Project area for Phase IV wetland restoration project on O'Dell Creek, Granger Ranch.**

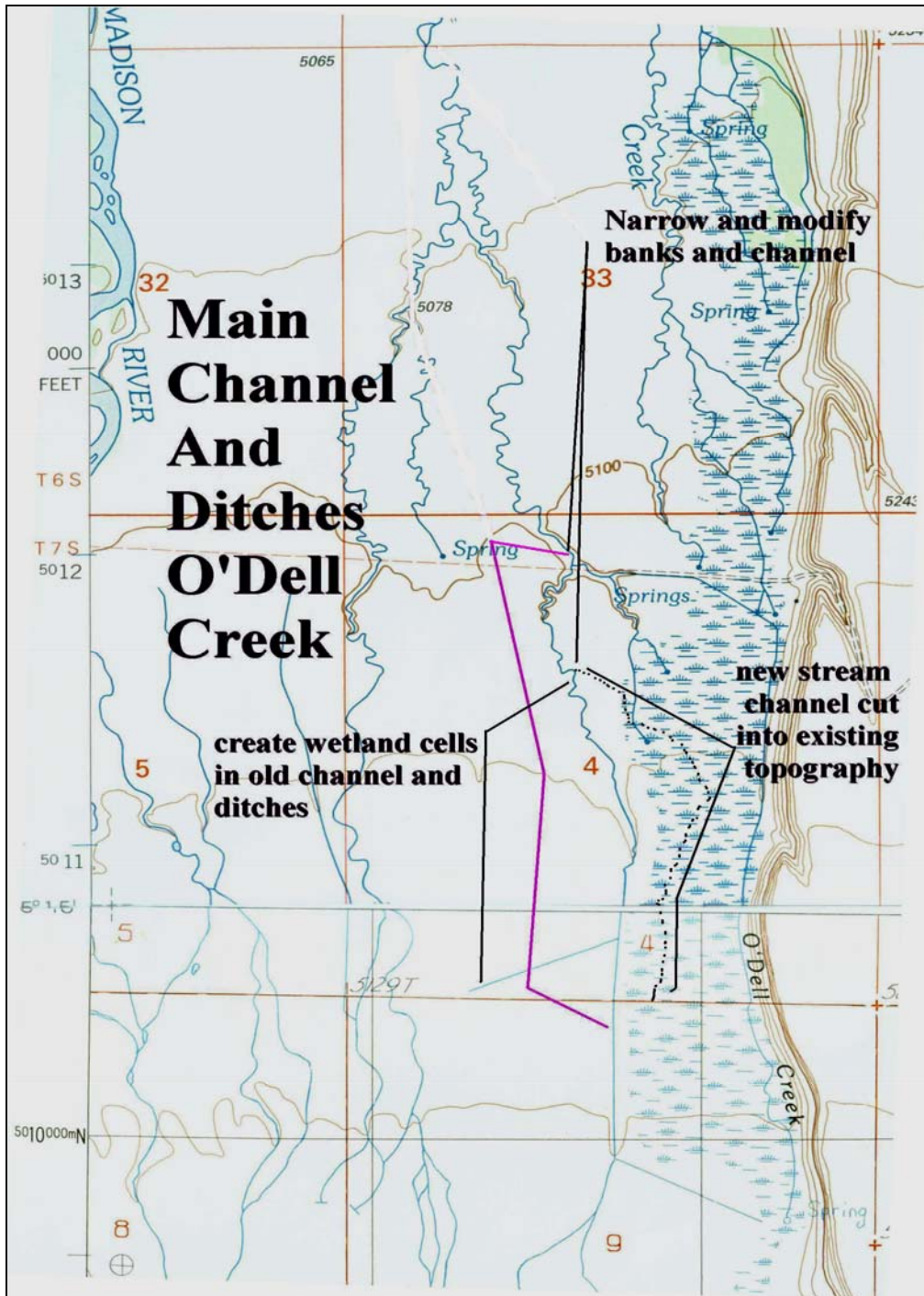


Figure 2. Proposed wetland restoration project area with general construction objectives.

## 1.2 Need for the Action

From 2004 through 2006, FWP accepted mitigation fees from eight agencies and businesses that applied to the Army Corps of Engineers for Section 404 permits. These specific permits allowed permittees to place fill in jurisdictional wetlands as part of construction projects in exchange for paying a fee to FWP in lieu of mitigating their wetland impacts. FWP and the Army Corps of Engineers have agreed that the mitigation required to offset these impacts could be met by restoring a portion of the O'Dell Creek Headwaters (OCH) Site south of Ennis in Madison County, Montana. FWP has been working with conservation agencies and organizations on the site since 2005 to restore what was estimated to be a 1,000 –acre wetland that was largely drained by ditches dug through the site in 1955. The benefits of this project include restoring dry, somewhat weedy, drained areas to their historic, productive wetland condition, expanding habitat for fish and wildlife, increasing surface water flow into the Madison River, and enhancing the quality of water on as well as discharging from the site.

## 1.3 Objectives of the Action

- 1.3.1 The goal of the O'Dell Creek Headwaters (OCH) ILF mitigation project is to restore wetland function to at least 16.64 acres within the project area that do not currently meet wetland criteria established in the Corps of Engineers' 1987 Wetland Delineation Manual. This will be accomplished through restoring a length of a tributary stream of O'Dell Creek after plugging existing drainage ditches on the site.
- 1.3.2 Restoration of the OCH is expected to deliver a consistently high rate of cold-water discharge into O'Dell Creek, which enters the Madison River just downstream from the town of Ennis. The Madison River, as a primary headwater tributary to the Missouri River, and a world class trout fishery, has been experiencing record low flows and high water temperatures in recent years. This project is expected to provide some benefit to the Madison River in terms of flows and fish habitat.

## 1.4 Applicable Permits and Other Consultation Requirements

### 1.4.1 Permits

Army Corps of Engineers – 404 (Pending)  
Montana Department of Environmental Quality – 319 (Approved)  
Madison Conservation District – 310 (Pending)

### 1.4.2 Other Consultation Requirements

Montana State Historical Preservation Office – site reviewed and approved in 2007 for construction.

## 1.5 Consultation with Other Agencies and Interested Parties

Many agencies, organizations, and individuals have reviewed the O'Dell Creek Headwaters area in consideration of its potential for restoration and conservation work. Those who have toured, reviewed, and evaluated the project and its merits include Montana Governor Brian Schweitzer, the Army Corps of Engineers Helena Regulatory Office, U.S. Fish and Wildlife Service personnel, USDA Natural Resources Conservation

Service and Farm Service Agency personnel, the North American Wetlands Conservation Council, the Montana Land Reliance, the Trust for Public Land, representatives of the Madison Valley Ranchlands Group, and the Missouri River Conservation Districts Council.

## **Chapter 2.0: Alternatives Including the Proposed Action**

### **2.1 Introduction**

FWP is obligated to create or restore a minimum of 16.64 acres of wetland habitat through the In Lieu Fee Mitigation program. The proposed action and a no action alternative are the only viable options for consideration at this time. If the no action alternative is selected, a new mitigation site will need to be identified by FWP in collaboration with the Army Corps of Engineers, which will also require a separate MEPA analysis.

### **2.2 Description of Alternatives**

**2.2.1 No Action Alternative.** Under this alternative, the drainage ditches and channelized stream course would remain in their current state. Habitats that were former wetlands would remain dry upland sites. FWP would not fulfill its obligation to the Corps for mitigating earlier wetland impacts.

**2.2.2 Proposed Action Alternative.** Acquisition of a Conservation Easement and Restoration of Wetland Habitat along O'Dell Creek Tributary

The current conceptual design for the proposed project involves restoring 2,295 feet of existing stream channel to a natural pattern to improve depth and temperature, constructing 5,800 feet of meandering channel to convey primary stream flow across the site, and closing 4,260 feet of drainage ditch and dredged channel to restore wetland hydrology, soils, and hydrophytic vegetation in the surrounding historic wetland habitat. Construction would be accomplished with hydraulic excavators, a skid steer, and tracked dump truck to minimize disturbance to the surface vegetation. The project would be built in May and June 2008 with construction completed by the end of June. Area disturbed by construction is expected to be approximately 53 acres. Vegetation mats derived from construction will be used to rehab moist disturbed sites that cannot be seeded. Disturbed upland sites will be seeded to a grass-forb mixture to reduce the likelihood of weeds encroaching into the area. The construction site will be monitored and managed to assure disturbed sites fully revegetate with suitable plant species.

The 225-acre conservation easement donated by the Granger Ranch would provide legal protection in perpetuity to the mitigation site and immediate surroundings. The easement would protect wetland values associated with the mitigation project and also would allow for conservative livestock grazing

described as grazing 2 out of 3 years from August 1 through October using a stocking rate of 1.4 acres/animal unit month.

## **Chapter 3.0: Affected Environment**

### **3.1 Physical Resources**

#### **3.1.1 Land Resources**

The project site occurs 65 miles south of Ennis in the greater Madison River flood plain. The flood plain along this section of the Madison River is over 2.5 miles wide. The project area occurs about 1 mile east of the Madison River adjacent to a higher plain escarpment. Parent soils are generally water-deposited from surrounding mountains and meandering flows of the Madison River. Soil textures are variable and include low shallow silt areas, gravel to cobble dry sites with intermittent clay and sand deposits. Remnant wetland sites contain highly organic silts. Most upland sites that historically were wetland habitat (prior to construction of drainage ditches and stream channeling in the 1955) are currently well-drained and arid with relatively low productivity and considerable bare soil.

#### **3.1.2 Vegetation Resources**

The project site was historically wetland, dominated by wetland obligate plants and facultative wetland plants. In its current drained condition, the site has less vegetative diversity dominated by arid upland plants. Shrubs and trees are currently nearly absent from the site due to decades of grazing and haying in a manner that was not compatible with woody vegetation. Upland plants that did not typically occur in the area including Canada thistle and other weedy species dominate parts of the OCH site. Restoration of the area is expected to reduce the number and/or size of thistle patches, and enhance the growth of wetland plants and those palatable to wild and domestic ungulates. There are no known unique, rare, threatened, or endangered plants on the site based on vegetative surveys by University of Montana, Aquilavision, Copeland Biologicals, and field investigators. Field investigations have also not shown major infestations of noxious weeds on the site. It is not anticipated that this project will create a weed problem on the site.

#### **3.1.3 Fish & Wildlife Resources**

The project site currently supports a variety of bird, mammal, and fish species. However, comparing between restored wetland habitats and ditched/channelized habitats in the O'Dell Creek Headwaters area, there is a considerable difference as to wildlife species richness and abundance. Shallow moisture, resulting lush vegetation and standing water play a considerable role in attracting a much broader diversity of wildlife and fish species.

#### **3.1.4 Water Resources**

The water source for this project is an unknown number of springs that arise within the OCH area, some within the exterior boundaries of the mitigation site.

These water sources are believed to represent water emanating from the toe of the Cedar Creek Alluvial Fan, the primary geologic feature of the area which feeds wetlands along the east side of the Madison Valley from Ennis Lake south beyond the OCH area.

#### 3.1.5 Air Quality

The air quality in the Project Area is comparable to other sparsely populated intermountain valleys of central and western Montana. Pollution levels are generally low except during unique circumstances such as fire events or isolated dust storms.

### 3.2 Human Resources

#### 3.2.1 Land Use

The restoration site has been used intensively for livestock grazing and hay production for at least five decades. It has experienced a slow decline in productivity due to grazing impacts and effective draining of wetland habitat.

#### 3.2.2 Cultural Resources – The proposed project site has been surveyed for culturally-significant resources by a qualified archaeologist in collaboration with the State Historical Preservation Office. Areas where construction is proposed to occur did not reveal any culturally significant resources.

#### 3.2.3 Recreation & Aesthetic Resources

The Granger Ranch allows limited public access for hunting, fishing and other recreational pursuits. There are considerable opportunities for hunting, fishing, and general wildlife viewing.

## Chapter 4.0: Environmental Consequences

### 4.1 Introduction

The Proposed Action is expected to benefit the physical and human environment associated with the Project Area. The following section compares consequences of the Proposed Action to the No Action alternative.

### 4.2 Predicted Attainment of the Project Objectives of all Alternatives

#### 4.2.1 Predicted Attainment of Project Objective #1

4.2.1.1 No Action: This alternative would maintain the current situation. Sites that were formerly wetland habitat will remain arid short-grass habitats.

4.2.1.2 Proposed Action: This alternative would restore wetland habitats to near historic characteristics. Former arid sites would be restored to wetland characteristics resulting in a minimum of 16.64 restored wetland acres.

#### 4.2.2 Predicted Attainment of Project Objective #2

4.2.2.1 No Action: Water flows and temperature would remain unchanged.



- 4.2.2.2 Proposed Action: Based on water monitoring since 2005, we anticipate that flows would increase and water temperatures would be maintained at a temperature that is optimal for trout habitat, both as a result of a restored stream channel and improved subsurface water storage capacity.

#### 4.3 Predicted Effects on Relevant Affected Resources of All Alternatives

##### 4.3.1 Predicted Effects on Land Resources

- 4.3.1.1 Effects of No Action: This maintains the status quo. Land resources would remain in a semi-desertified state because of an artificially low water table. Soils would remain dry with a sparse covering of vegetation and considerable bare ground.
- 4.3.1.2 Effects of Proposed Action: Restoring the proposed section of stream course would raise the water table and improve soil productivity, restoring soils to their historic wetland characteristics.

##### 4.3.2 Predicted Effects on Vegetation Resources

- 4.3.2.1 Effects of No Action: Sparse grass and weedy vegetation would continue to dominate the Project Area. The combination of low water table, shallow and coarse soils, and arid climate will only support limited dry land vegetation.
- 4.3.2.2 Effects of Proposed Action: The immediate result of plugging drainage ditches and diverting flows to a restored stream channel is the recurrence of a shallow water table. Riparian vegetation, including lush grass and woody shrubs depends largely on a shallow water table and secondarily on well-managed ungulates. We anticipate a considerable positive vegetative response from the wetland restoration, resulting in a dramatic increase in vegetative diversity and productivity. Conservative grazing will further maintain and conserve these wetland values.

##### 4.3.3 Predicted Effects on Fish & Wildlife Resources

- 4.3.3.1 Effects of No Action: Wildlife and fish currently use the project site but given its arid habitat and shallow channelized stream, both the uplands and stream are of limited value.
- 4.3.3.2 Effects of Proposed Action: Although the primary purpose of the O'Dell Creek Headwaters (OCH) restoration project is to restore at least 16.64 acres of wetland habitat, considerable fish and wildlife benefits will also result. Spring creek restoration projects in the area that were completed by partner agencies and organizations have revealed increases in the numbers and size of trout based on FWP surveys. These sites have also experienced increases in spawning rainbow trout that were formerly dominated almost exclusively by brown trout. Both species are of significant economic and recreational benefit to O'Dell Creek anglers, anglers on the Madison River, and to the economies of Ennis and nearby communities.



Studies by researchers from the University of Montana's Avian Science Center have conclusively shown an increase in the diversity and abundance of breeding birds where past restoration projects have been completed along tributaries of O'Dell Creek. Greater sandhill cranes now nest on restored portions of the OCH site, as do sora rails and other wetland dependent birds. Rocky Mountain trumpeter swans, a priority species for FWP based on its Comprehensive Fish and Wildlife Conservation Strategy, winter throughout the site. Restoration of the OCH wetlands is expected to provide additional breeding habitat for ducks, geese, and potentially trumpeter swans. River otters have moved into the OCH wetland since the first restoration work was done, a unique occurrence not documented previously. The OCH site has an active bald eagle nest. Adults and young from that nest territory forage for fish throughout the OCH area. Prior to its restoration, the use of this site by bald eagles during the summer was uncommon.

#### 4.3.4 Predicted Effects on Water Resources

- 4.3.4.1 Effects of No Action: Water would continue to flow from and through the Project Site. Benefits derived from the water would remain limited, due to a deep water table, shallow channelized stream course, and somewhat lesser flows and warmer temperatures.
- 4.3.4.2 Effects of Proposed Action: Construction and soil disturbance work will result in temporary sediment loads derived from both the stream channel and runoff flows. Increased sediment loads are temporary and mitigation measures will be implemented to minimize erosion. This impact is considered minor.

Past restoration work in the O'Dell Creek Headwaters area has increased the amount of groundwater (subsurface water) that exists on the site. Flow monitoring data gathered by DJP Consulting, LTD., the site's primary contracting firm, have conclusively shown that flow of water discharged into O'Dell Creek from the wetlands restored thus far is far greater than emanated from the wetland prior to any restoration being completed. The Proposed Action is expected to have a similar effect on increasing the flow of surface water from the site. DJP Consulting's temperature data collection efforts for the past three years have also consistently shown that the restored areas keep the water temperature in the restoration area within the optimal range for growth and reproduction of trout. As a result of earlier restoration projects, larger quantities of cooler water are discharged into O'Dell Creek and ultimately into the Madison River from the restoration area during the critical summer months. With the recent dewatered, warmed condition of the Madison River over the past several years, this additional discharge of cool water from the O'Dell Creek site into the River is believed to directly benefit the River and its downstream water users.

#### 4.3.5 Predicted Effects on Noise Resources

- 4.3.5.1 Effects of No Action: There are currently very few if any noises in the project site outside of natural noises and periodic farming equipment or ranching vehicles.
- 4.3.5.2 Effects of Proposed Action: Construction would result in an increase in noise that is minor and temporary. There are no nearby human dwellings that would hear the equipment.

#### 4.3.6 Predicted Effects on Land Use Resources

- 4.3.6.1 Effects of No Action: The project site has experienced a slow decline in productivity for grazing and haying forage. Improvements in grazing management alone would likely produce a positive response in vegetation. However, the arid characteristics over much of the project site limit the potential for substantial forage production.
- 4.3.6.2 Effects of Proposed Action: The Proposed Action to restore the natural, wetland character of the site is not compatible with season-long livestock grazing and removal of vegetation by haying. The conservation easement between FWP and the Granger Ranch would stipulate that grazing of the site be allowed in perpetuity but only under a prescription that will limit the intensity, duration, and frequency of grazing. This may represent a reduction in the amount of livestock forage that the ranch may take off the site each year and for the long term. However, because the site is declining in productivity in its current condition due to drying of the site from drainage and the encroachment of weeds such as Canada thistle, restoration of wetland characteristics may increase the amount of palatable forage the site produces. This change could create a near balance between the amount of palatable forage currently available to livestock versus that produced on the restored site even though the Proposed Action limits the Ranch to a conservative grazing prescription. The grazing prescription in the conservation easement is essential to protect the bed and banks of the spring creeks, to restore and maintain the functions and values of the wetlands, and to restore and maintain the value of the site to diverse and abundant fish and wildlife populations. The Ranch considers this to be a desirable change in the restoration area because although they will be restricted to less grazing of the restoration site, they consider it to be a real benefit to have greater numbers and diversity of fish and wildlife occurring there.

#### 4.3.7 Predicted Effects on Cultural Resources

- 4.3.7.1 Effects of No Action: This would not involve any construction or ground disturbance.
- 4.3.7.2 Effects of Proposed Action: The project site has been reviewed for cultural resources by a professional archaeologist, in collaboration with the State Historical Preservation Office. No resources of concern were found in the area proposed for construction.

- 4.3.8 Predicted Effects on Recreation & Aesthetics Resources
- 4.3.8.1 Effects of No Action: The project site currently provides limited hunting, fishing and wildlife viewing opportunities. The Granger Ranch allows limited access for these activities.
- 4.3.8.2 Effects of Proposed Action: The restoration project would improve opportunities for recreation and would improve aesthetic values, especially associated with the restored stream and the onset of riparian vegetation. The proposed action does not guarantee public access to the 225-acre project site.
- 4.4 Summary of Impacts of Proposed Action: Construction and restoration work will generally result in direct short-term minor and mitigatable negative impacts related to elevated sediment loads and noise. Over the long term, the Proposed Action provides beneficial impacts to soil productivity, water quality, vegetation productivity and diversity, wildlife abundance and diversity, and aesthetics. The Proposed Action complements past restoration efforts accomplished by partner agencies and organizations. There are no known cumulative negative impacts associated with the Proposed Action neither are there long-term indirect negative impacts.

## Chapter 5.0: Anticipated Timeline

FWP Commission Endorsement	April 2008
Public Comment Period for EA	Mid-April through Mid-May 2008
FWP Commission Final Approval	May 2008
Montana Land Board Approval	May 2008
Project Commencement	May 2008
Project Completion	June 2008

## Chapter 6.0: Public Involvement

The public will be notified in the following manners to comment on this current EA:

- Public notices in the paper: *Bozeman Chronicle; Madisonian*
- Public notice on the Fish, Wildlife & Parks web page: <http://fwp.mt.gov>
- 

Copies of this environmental assessment will be distributed to neighboring property owners and interested parties. Additionally, public meetings will be schedule if requested.

The public comment period will extend for (30) thirty days following publication of the legal notice in area newspapers. Written comments will be accepted until 5:00 p.m., May 5, 2008 and can be mailed to the address below:

Montana Fish, Wildlife & Parks  
C/O O'Dell Creek Headwaters Restoration  
1400 South Nineteenth Avenue  
Bozeman, MT 59715

Or email comments to: [fwpwld@mt.gov](mailto:fwpwld@mt.gov)  
please refer to Subject: **O'Dell Creek Project**

## **Chapter 7.0: Conclusion**

In Chapter 4, Environmental Consequences, FWP analyzed the impacts of 2 alternatives. For each impact, FWP considered the significance criteria, as set out in 12.2.421, ARM, including a) the severity, duration, geographic extent, and frequency of impact; b) the probability that the impact will occur or reasonable assurance that the impact will not occur; c) growth-inducing or growth-inhibiting aspects of the impact, including the relationship of the impact or contribution to the cumulative impacts; d) the importance to the state and to society of each environmental resource or value affected; e) any precedent that would be set as a result of an impact of the proposed action that would commit the department to future actions; and f) potential conflicts with local, state, or federal laws, requirements, or formal plans.

Through these reviews, FWP determined that none of the effects associated with these alternatives would have a significant impact on the physical environment or human population in the area. An EA is therefore the appropriate level of analysis for the proposed action and an Environmental Impact Statement will not be required. Specifically, there are not significant impacts of the Proposed Action because it sets out to reverse negative impacts from the past that will ultimately benefit the project site and surrounding area.

## **Chapter 8.0: Coordination and Partners**

### **8.1 Partners for the proposed O'Dell Creek Headwaters project:**

Montana Land Reliance, PPL Montana, The Trust for Public Lands, USDA Natural Resource Conservation Service, USDA Farm Service Agency, and U.S. Fish and Wildlife Service

### **8.2 Environmental Assessment prepared by:**

Tom Hinz, Montana Wetlands Legacy Partnership Coordinator  
Montana Fish, Wildlife & Parks  
1400 S. 19<sup>th</sup> Ave.  
Bozeman, MT 59718

## **Chapter 9.0: References**

Fletcher, R., Cilimburg, A. and Hutto, R. 2006. Evaluating Habitat Restoration at O'Dell Creek Using Bird Communities.

## **APPENDICES**

### **A – Site/Monitoring Plan**

**Site/Monitoring Plan  
Granger Ranch In Lieu Fee Wetland Mitigation Site  
Upper Missouri Watershed – O’Dell Creek Headwaters  
Prepared by  
Montana Fish, Wildlife and Parks  
1420 East Sixth Avenue  
Helena, MT 59620-0701**

## **INTRODUCTION**

Pursuant to an agreement between the Corps of Engineers and Montana Fish, Wildlife and Parks, FWP collected fees associated with wetland impacts for twelve Section 404 permit applications in five watersheds from March 2004 until December 2006. FWP notified the Corps of its intent to terminate the program in December, 2006. The Corps responded in agreement to this request in January 2007 with the provision that FWP would complete one or more mitigation projects using the accumulated fees before June 30, 2008. FWP informed the Corps of its intent to withhold a portion of the accumulated fees beyond June 30, 2008 in order to defray monitoring costs for the site. Both agencies agreed by September 2007 that a single mitigation site would be developed in the Upper Missouri River watershed where eight of the twelve 404 permitted activities involved in the program are located. This Site/Monitoring Plan will describe how and when the proposed mitigation site will be developed, and the steps that FWP will follow to demonstrate to the Corps that it has met its obligation to create 16.64 acres of wetland mitigation.

## **SITE PLAN**

A. Location, size, baseline condition (extent and inventory of existing wetlands and aquatic resources), site history, and type of aquatic resource compensation to be provided

The O’Dell Creek Headwaters (OCH) mitigation site is located in Madison County, Montana in Section 4, T7S, R1W.

This site is an historic wetland based on review of aerial photographs and maps of the site which date back to the late 1930’s. Construction of three previous phases of restoration on the OCH site have clearly demonstrated the presence of a relict peatland under at least part of the OCH, some of which has a peat layer several inches in depth.

16.64 acres of compensatory mitigation resulting from this project is proposed to emanate from restoration of surface hydrology, reestablishment of primarily wetland vegetation, and rewetting of the wetland soils such that they meet the 1987 Corps Wetland Delineation Manual criteria. The baseline wetland delineation to document the pre-construction condition of the proposed mitigation site was conducted by Calypso Ecological Consulting in early October 2007 for DJP Aquatic Consulting Ltd.

B. Goals and objectives of the mitigation plan and schedule for conducting the activity that will provide compensatory mitigation

**The goal of the O'Dell Creek Headwaters (OCH) ILF mitigation project is to restore wetland function to at least 16.64 acres within the project area that do not currently meet wetland criteria established in the Corps of Engineers' 1987 Wetland Delineation Manual. This will be accomplished through restoring a length of a tributary stream of O'Dell Creek after plugging existing drainage ditches on the site.**

In addition to drawing from the knowledge of its own staff, FWP has consulted with members of the ILF Review Committee and others knowledgeable in the field to solicit feedback on the OCH project and proposed conceptual design. In so doing, FWP intends to meet the mitigation objective by integrating this ILF mitigation project as one phase of a multi-year, multi-phase partner project on the OCH site that has thus far restored over 19,000 feet of stream and restored over 200 acres of wetlands. Based on the success of these three previous projects completed adjacent to the current proposed project site, all partners involved recommend proceeding with this proposed plan.

C. Site selection criteria, to include practicability considerations for successful project establishment and watershed priority needs

As referenced above, this single mitigation site lies in the Upper Missouri River watershed where eight of the twelve 404 permitted activities involved in the In Lieu Fee Mitigation Program are located. Additionally, the OCH mitigation site was selected based on the following criteria: 1.) the OCH restoration is an estimated 5,000-acre site with surface features that suggest that much of the site was historically wetland; 2.) the OCH has an abundance of surface water emanating from springs that upwell throughout the area; and 3.) restoration efforts on the OCH site from 2005 through 2007 have shown consistently encouraging results with no failure of constructed stream channels and vegetative and hydrologic recovery is occurring at an encouraging rate. The Madison River, as a primary headwater tributary to the Missouri River, and a world class trout fishery, has been experiencing record low flows and high stream temperatures in recent years. Continued restoration of the OCH is expected to deliver a consistently high rate of cold water discharge into O'Dell Creek, which enters the Madison River just downstream from the town of Ennis. This enhancement to the quantity and quality of discharges into the Madison River is expected to produce ecological and socio-economic benefits throughout the area and the watershed.

## **MITIGATION WORK PLAN**

A. Boundaries of proposed treatment, including buffers.

The mitigation site is located in the southeast quarter of Section 4, Township 1 West, R 1 West, Madison County, Montana. The boundaries of the proposed treatment area will include approximately 30 acres of what is now primarily upland habitat within which wetland

characteristics will be restored. The exact location of the thirty acres will be decided once the wetland delineation report for the site has been finalized and results of a LIDAR flight over the area in September 2007 are also available. The wetland delineation and LIDAR data will facilitate locating the restoration area over the most appropriate 30 acres based on maximal restorable wetland acreage with a smaller associated upland buffer at or near its perimeter.

**B. Construction methods, timing and sequence**

Project design and layout will be completed by April 30, 2008. Securement of necessary 404, 310, and other permits as well as cultural resource evaluation and SHPO clearance will also be accomplished by this date. The current conceptual design for the proposed project is the same as that for the 2005-2007 phases of the project. This involves plugging existing drainage ditches with fill available on the site, and digging a meandered stream channel to convey primary stream flow across the site. The combined effect of the ditch plugging and directing the previous ditched water through a created channel running the length of the wetland is expected to bring the surface hydrology back up to historic level. Construction will be accomplished with spider and track hoes to minimize disturbance to the surface vegetation. The project will be built in May and June, 2008 with construction completed by the end of June.

**C. Source of water supply and connectivity to other aquatic resources**

The water source for this project is an unknown number of springs that arise within the OCH area, some within the exterior boundaries of the mitigation site. These water sources are believed to represent water emanating from the toe of the Cedar Creek Alluvial Fan, the primary geologic feature of the area which feeds wetlands along the east side of the Madison Valley from Ennis Lake south beyond the OCH area. The Granger Ranch holds at least two senior water rights to Madison River water upstream from the mitigation site as well as at least one water right from O'Dell Creek downstream from the proposed mitigation site. None of these rights are currently dedicated to restoration of the OCH site, either for the 2008 Phase IV project or Phases I or II. This is based on stream flow data maintained since the beginning of Phase I by DJP Consulting which clearly show that discharge from the restoration area at the downstream end of the OCH site has increased since the restoration began in 2005 (Don Peters, pers.comm.). Although there is anticipated to be some evaporative and evapotranspirative loss from the Phase IV mitigation site, this will be more than offset by the enhanced surface water flow from the site due to recharging of the now nonfunctioning wetland areas with the mitigation site. If at any point, it is determined that a Change Application is needed to dedicate surface water from existing Madison River rights owned by the Granger Ranch to offset water used in this or future phases of the OCH restoration, the Granger Ranch has indicated that they will file that Change Application with DNRC.

**D. Topographical/microtopographical requirements related to hydrology and vegetation establishment**

The OCH area is relatively flat. A LIDAR flight completed over the area in September, 2007 may inform the project design to take advantage of all microtopographical features on the proposed restoration site, ensuring appropriate surface water elevations on both low and higher elevation sites to maximize resulting wet meadow and emergent wetland acres. Grading of stream banks and



wetland ponds within the project site will be based on the same standards as the Phase I through III projects. Representative cross sections, bed elevation measurements and slope profiles will be developed within the project site to guide construction and ensure ability to monitor any changes that occur in channel configuration during the monitoring period. (See the following page (s) for the restoration Design Criteria).

#### **OCH Restoration Site – Design Criteria:**

*[Note: the contractor for project design and construction oversight has not been selected at this time. Once selected, Design Criteria will be inserted into this portion of the document]*

#### **E. Planting schedule**

Planting will be limited to revegetation of upland sites with an upland grass/forb seed mix where necessary to attempt to prevent encroachment of weeds into disturbed areas. This seeding will occur immediately after machinery is moved off the site and hopefully before spring rains in the area subside. Willow planting guidelines as required by the NRCS CREP contract are currently being discussed by NRCS and the Granger Ranch. More detailed plans in regard to those plantings will be appended in the final Site Plan as appropriate. At the present time, willow planting is at least intended to include transplanting of willows in the harvested sod mats which in the Phase I and II projects have already begun to grow well in areas where site conditions are conducive to willow growth. It is possible that the “willow planting plan” for the Phase IV project may be limited to the reestablishment of willows that occurs through transplanting of these sod mats that currently contain willow seedlings and/or roots.

#### **F. Reliance on natural vegetation**

Over ninety percent of the project site will be left to revegetate naturally. Wetland obligate and facultative/wetland plants are expected to gradually replace upland, facultative, and facultative/wetland plants that now predominate. Sod mats will be shallowly harvested from depressional areas within the project site to place along stream banks to stabilize them. Sod borrow patch size and minimum spacing between borrow strips will be small, using the same parameters as in Phases I through III which have been observed in the field by USACE Helena staff. Harvest area locations will be based on the results of the September, 2007 LIDAR microtopographical survey. Harvest areas that fill with groundwater will be left as shallow, open water, and emergent marsh less than 1-2 feet in depth. Mat harvest areas that do not fill with ground water will be left to revegetate on their own. It is expected that the dense Baltic rush community in the area will rapidly colonized sod mat harvesting sites. Sod mats will be translocated from harvest sites to streamside locations with the use of a spider hoe and by hand. Sod mats will be harvested in small patches rather than large ones and will be selected based on a predominance of sedge, rush, and some willow stock already growing in them.

#### **G. Weed control**

Vegetative surveys completed on the site by Aquilavision, a Missoula-based firm contracted by Madison County to aerially map weed infestations in the county, have shown that there are mixed stands of upland grasses and forbs on the restoration site with a moderate density of Canada thistle. Spotted knapweed, leafy spurge, Dalmatian toadflax, and other noxious weeds found elsewhere in the Madison Valley have not been documented on the proposed OCH site. The standard for weed tolerance on the site will be adhered to, that is, that there will be less than 5% noxious weed infestation on the site. During the monitoring period, we intend to demonstrate a declining trend in the percentage of noxious weed infestation on the site.

#### **H. Erosion control**

Because of the flat topography of the entire restoration site and the relatively constant flow of the springs and spring creek channels in the vicinity, erosion is not a significant concern for the project. Where it does occur, seeding and woody plantings will be used to promote bank stability and to encourage native plants to compete with invasive species. Significant transport of soil and gravel from the stream banks, ditch banks, and streambed has not been observed in any of the Phase I, II, or III construction or post-construction phases. Based on the type of machinery that will be employed during construction and the small, patchy nature of sod mat harvest, there will be a very small area of disturbance, minimizing potential for erosion in upland and other sites. As part of the project's monitoring phase, there will be some replicated stream profile surveys to ensure that the completed project maintains the desired stream profile and grades. General bank stability will be monitored through ocular surveys and replicated photo points. Rather than installing groundwater-monitoring wells, the project will include continued maintenance and data gathering utilizing staff gauges in and near the restoration site. These data will be supplemented with data collected from 2005-2007, providing a multi-year, season-to-season overview of surface hydrology in the restoration area including stream discharge rate as well as demonstrating gaining and losing reaches of the channels in the OCH.

## I. Management considerations including fencing and grazing

Management of the site in perpetuity will be guided by conservation provisions in an existing conservation easement between the Granger Ranch, NRCS, and Montana Land Reliance which was completed in 2006. As part of an overlapping easement with the Granger Ranches, FWP has worked out the following grazing prescription that ensures protection of soil, vegetation, and overall wildlife habitat. The grazing prescription will take effect in 2020 when the existing USDA Conservation Reserve Enhancement Program contract, which overlays the mitigation site, expires. Grazing prescription follows:

**Stocking Rate:** A conservative stocking rate of up to 1.4 acres per AUM. 1 AUM is defined as 1 cow with 1 calf grazing for 1 month.

**Mineral Supplement:** No placement of minerals or other supplements on the mitigation site. If it is necessary to place mineral blocks in the pasture they will be placed on the highest, driest, and rockiest locations. Place mineral block as far away as possible from water and stream bank areas.

**Period of Use & Grazing Frequency:** The pasture will be open for grazing 2 out of 3 years from about August 1 to late October within the recommended stocking rate. Once the stocking rate is achieved cattle will be moved to another location on the ranch. Every third year the pasture will be rested from livestock grazing for the entire year. The pasture would be grazed 2 consecutive years, rested, then grazed again for 2 consecutive years, etc. No winter grazing or feeding is permitted. Grazed years will be 2020, 2021, 2023, 2024, 2026, 2027, 2029, 2030 and so on.

## COSTS

<b>Design and Permit Acquisition</b>	<b>\$ 28,000</b>
<b>Construction</b>	<b>\$294,000</b>
<b>Construction Administration</b>	<b>\$ 12,000</b>
<b>Monitoring and Reporting</b>	<b>\$ 60,000</b>
<b>Easement Recording</b>	<b>\$ 200</b>
<b>Project Oversight and Administration</b>	<b>\$ 0</b>
<b>TOTAL</b>	<b>\$394,200</b>

## PERFORMANCE STANDARDS

- A. Restore at least 16.64 acres of wet meadow and emergent marsh wetland
- B. Maintain as-built streambed profile and detection/arrest of any head cuts that develop

- C. Meet 1987 Corps Wetland Delineation Manual criteria for A. To ensure verification of the hydrology standard, install groundwater monitoring wells to demonstrate a saturated soil profile for at least 12.5% of the growing season. One well will be placed within each wetland polygon of at least 5 acres in size. If there is a single wetland polygon, two wells will be installed.
- D. Protect mitigation site in perpetuity via easement between Granger Ranch and FWP. Secure conservation easement with Granger Ranch by June 30, 2008.
- E. (There will be no streambed standard because no stream mitigation credits are needed to result from this project).
- F. Less than 5% noxious weed infestation on the site
- G. Water surface profile will be developed and monitored as the hydrology performance standard

## **REPORTING PROTOCOLS AND MONITORING PLAN**

FWP will gather data through its monitoring program for the site that will meet the Corps' requirements for successful mitigation of wetlands on the site. This documentation will include:

1. Monitoring wetland boundaries during mid-growing season
2. Monitoring borrow sites to include replicated photos and estimated foliar cover and determination of dominants (estimated cover of at least 20%)
3. Wetland vs. open water mapping
4. Vegetation community mapping (general community overlay on aerial image)
5. Vegetation transects to detect community changes including status of noxious weed populations
6. Wetland delineation to gather wetland soils data
7. Stream monitoring, including stream gauge maintenance and data gathering to develop water surface profile and to add to the hydrologic dataset as well as to demonstrate maintenance of the as-built stream profile
8. General wildlife use including observations of reptiles, amphibians, mammals and other vertebrates
9. Maintain representative photo points as part of normal wetland delineation activities
10. Complete MDT functional assessment for the site preconstruction and at the end of the monitoring period
11. Project site maintenance will be facilitated by GPSing site boundary corners for long-term site visits and relocations. During the monitoring phase of the project, delineation transects and flag locations will be maintained and markers replaced as needed to ensure consistency and comparability of data collected.

Construction will occur in the spring of 2008. Monitoring will be conducted in 2009 and again in either 2010 or 2011 depending on the results of the 2009 data gathering effort. If wetland conditions develop on the site by 2010 or 2011 monitoring will end and a final report and request for credit verification by the Corps of Engineers (USACE) will be produced. If wetland conditions have not developed by the 2010/2011 monitoring period, FWP and the USACE will meet to discuss necessary remedial actions to achieve performance standards.

## **LONG TERM PROTECTION PLAN**

### **A. Financial and legal protections**

FWP will hold back some of the fees collected to finance monitoring and reporting. Legal protection of the site by FWP will be secured through conservation easement with the Granger Ranch. That easement will assign protection of the site in perpetuity.

### **B. Responsibility for remedial actions necessary to successfully establish the site**

FWP will work in cooperation with the Granger Ranch to control noxious weeds within the 5% limit mentioned above, as well as conduct other remedial actions on the 2008 restoration site for the duration of the construction and monitoring phases. After that time, the Granger Ranch will resume responsibility for remedial actions having to do with management of noxious weeds, fire, and other normal ranch operation effects.

### **C. Site management/maintenance**

Long-term protection of the mitigation site will be secured in part through a conservation easement by and between FWP and the Granger Ranch. This easement will be reviewed and approved by the Corps before it is executed. Haying and grazing on the restoration site is prohibited by the current Conservation Reserve Enhancement Program (CREP) contract until 2020. Following expiration of that contract, the easement between FWP and the Granger Ranch will prohibit haying on the restoration site in perpetuity. Additionally, grazing on the restoration site when the current CREP contract expires will be prescribed by a grazing plan contained within the conservation easement between FWP and the Granger Ranch. This grazing plan will ensure that the restoration site will be protected from adverse livestock grazing effects in perpetuity. All other site management and maintenance considerations that occur after the end of the construction and monitoring phases will be addressed as a normal and customary part of enforcement of the conservation easements by the easement holders, which are NRCS, Montana Land Reliance, and FWP.

## **PERMITS AND AUTHORIZATIONS REQUIRED FOR THE PROJECT**

All local, state, and federal permits or other authorizations required for the project will be obtained by FWP and its contractors in time to complete the scheduled activities. This will include, but not necessarily be limited to, a Section 404 permit from the Corps, 310 certification from the Madison County Conservation District and FWP, and cultural resource clearance from the state historic preservation office.

## **APPENDIX**

*[Conservation Easement with Grazing Plan included here]*

